Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Office of the Secretary Of Defense

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 5:

PE 0305310D8Z / CWMD Systems: System Development & Demonstration

Date: February 2018

System Development & Demonstration (SDD)

Appropriation/Budget Activity

COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	8.230	17.048	-	17.048	17.887	18.784	19.714	20.688	Continuing	Continuing
813: System Development & Demonstration	0.000	0.000	8.230	17.048	-	17.048	17.887	18.784	19.714	20.688	Continuing	Continuing

### Note

Increase from FY2018 to FY2019 the result of reallocation across the portfolio in the POM-19 to better support full RDT&E cycle and technology transitions.

## A. Mission Description and Budget Item Justification

The Countering Weapons of Mass Destruction (CWMD) Systems program provides funding for research, development, integration, and deployment of CWMD capabilities. Funding is allocated to a portfolio of projects and activities in response to Combatant Command needs and research initiatives.

The CWMD Systems program is organized to develop, enhance, mature and transition technologies across the RDT&E continuum, from Advanced Technology Development through Operational Systems Development, as well as limited sustainment in unique cases. A focus area is investment in CWMD-related technologies that require additional development to transition them to mature capabilities, in response to validated, prioritized requirements. This effort fills a seam in which capability gaps are not being addressed adequately or sufficiently to meet warfighter needs. The CWMD Systems program closes gaps identified by specialized military units and leverages prior S&T investments to continue development and fielding of operational systems to those units.

The program's legacy focus on CWMD situational awareness capabilities remains a significant component of the investment portfolio. The Joint Requirements Oversight Council approved the Information Systems Initial Capabilities Document for CWMD Situational Awareness in 2015, which identifies the need for a family of systems to mitigate capability gaps identified by the Combatant Commands. U.S. Special Operations Command, which assumed CWMD mission responsibilities in January 2017 per the Unified Command Plan, is providing focus and direction for development of CWMD situational awareness capabilities. In June 2017, Deputy Commander USSOCOM requested support for development of a DoD CWMD "User Defined Operational Picture" (UDOP) that can access and share relevant WMD intelligence and operational information with DoD mission partners (Combatant Commands, U.S. Government agencies, and key allies). The CWMD Systems program funds initiatives to close CWMD situational awareness gaps by leveraging mature technologies and modifying existing systems. Existing DoD information systems, networks, and applications are utilized and/or modified using CWMD Systems funding. Development of new applications reuses software to the extent possible. The CWMD Systems program also funds technology-enabled analytical cells at the Defense Threat Reduction Agency and the Defense Intelligence Agency, which support Combatant Commands. These cells curate, synthesize, and contextualize CWMD information for end-users. This hybrid approach facilitates cross-organizational information sharing and collaboration, necessary for addressing the transregional character of WMD proliferation.

The CWMD Systems program utilizes four Research, Development, Test & Evaluation (RDT&E) program elements (BA-3 / PE#0303310D8Z, BA-5 / PE#0305310D8Z, BA-6 / PE#0306310D8Z, and BA-7 / PE#0607310D8Z), as well as an Operations and Maintenance (O&M) "CWMD Sustainment" line (PE#0901388D8Z ORC-2531).

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**Exhibit R-2**, **RDT&E Budget Item Justification**: PB 2019 Office of the Secretary Of Defense **Date**: February 2018

## **Appropriation/Budget Activity**

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 5: System Development & Demonstration (SDD)

PE 0305310D8Z / CWMD Systems: System Development & Demonstration

This Program Element (PE) funds engineering and manufacturing development of CWMD systems, components, technologies, and/or applications, including system development and demonstration, and initial operational test and evaluation. The purpose is to develop, build, and test systems, verify that all operational and derived requirements have been met, and support product development decisions.

This appropriation funds travel to support the requirements of this program, and work (including manpower) performed by a government agency or by private individuals or organizations under a contractual or grant arrangement with the government who conduct research, development and test and evaluation efforts.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	0.000	8.230	17.164	-	17.164
Current President's Budget	0.000	8.230	17.048	-	17.048
Total Adjustments	0.000	0.000	-0.116	-	-0.116
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
Congressional Adds	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	-			
Economic adjustments	-	-	-0.116	-	-0.116

# **Change Summary Explanation**

Increase from FY2018 to FY2019 the result of reallocation across the portfolio in the POM-19 to better support full RDT&E cycle and technology transitions.

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Exhibit R-2A, RDT&E Project Ju	stification:	PB 2019 C	Office of the	Secretary (	Of Defense					Date: Febr	uary 2018		
Appropriation/Budget Activity 0400 / 5					, , , , , , , , , , , , , , , , , , , ,						Number/Name) tem Development & Demonstration		
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost	
813: System Development & Demonstration	0.000	0.000	8.230	17.048	-	17.048	17.887	18.784	19.714	20.688	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

## A. Mission Description and Budget Item Justification

The Countering Weapons of Mass Destruction (CWMD) Systems program provides funding for research, development, integration, and deployment of CWMD capabilities. Funding is allocated to a portfolio of projects and activities in response to Combatant Command needs and research initiatives.

The CWMD Systems program is organized to develop, enhance, mature and transition technologies across the RDT&E continuum, from Advanced Technology Development through Operational Systems Development, as well as limited sustainment in unique cases. A focus area is investment in CWMD-related technologies that require additional development to transition them to mature capabilities, in response to validated, prioritized requirements. This effort fills a seam in which capability gaps are not being addressed adequately or sufficiently to meet warfighter needs. The CWMD Systems program closes gaps identified by specialized military units and leverages prior S&T investments to continue development and fielding of operational systems to those units.

The program's legacy focus on CWMD situational awareness capabilities remains a significant component of the investment portfolio. The Joint Requirements Oversight Council approved the Information Systems Initial Capabilities Document for CWMD Situational Awareness in 2015, which identifies the need for a family of systems to mitigate capability gaps identified by the Combatant Commands. U.S. Special Operations Command, which assumed CWMD mission responsibilities in January 2017 per the Unified Command Plan, is providing focus and direction for development of CWMD situational awareness capabilities. In June 2017, Deputy Commander USSOCOM requested support for development of a DoD CWMD "User Defined Operational Picture" (UDOP) that can access and share relevant WMD intelligence and operational information with DoD mission partners (Combatant Commands, U.S. Government agencies, and key allies). The CWMD Systems program funds initiatives to close CWMD situational awareness gaps by leveraging mature technologies and modifying existing systems. Existing DoD information systems, networks, and applications are utilized and/or modified using CWMD Systems funding. Development of new applications reuses software to the extent possible. The CWMD Systems program also funds technology-enabled analytical cells at the Defense Threat Reduction Agency and the Defense Intelligence Agency, which support Combatant Commands. These cells curate, synthesize, and contextualize CWMD information for end-users. This hybrid approach facilitates cross-organizational information sharing and collaboration, necessary for addressing the transregional character of WMD proliferation.

The CWMD Systems program utilizes four Research, Development, Test & Evaluation (RDT&E) program elements (BA-3 / PE#0303310D8Z, BA-5 / PE#0305310D8Z, BA-6 / PE#0306310D8Z, and BA-7 / PE#0607310D8Z), as well as an Operations and Maintenance (O&M) "CWMD Sustainment" line (PE#0901388D8Z ORC-2531).

This project funds engineering and manufacturing development of CWMD systems, components, technologies, and/or applications, including system development and demonstration, and initial operational test and evaluation. The purpose is to develop, build, and test systems, verify that all operational and derived requirements have been met, and support product development decisions.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Office of the Se	ecretary Of Defense	Date: F	ebruary 2018	}
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0305310D8Z / CWMD Systems: System Development & Demonstration	Project (Number/N 813 / System Deve		emonstratior
This appropriation funds travel to support the requirements of this progor organizations under a contractual or grant arrangement with the go				individuals
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019
Title: P*813 / System Development & Demonstration		0.000	8.230	17.048
<b>Description:</b> • Perform engineering and manufacturing development of applications • Perform system development and demonstration and initial operation • Provide support to program management office on product development	nal test and evaluation			
FY 2018 Plans:  • Perform engineering and manufacturing development of CWMD syst specialized military units  • Perform system development and demonstration and initial operation  • Provide support to program management office on product development	nal test and evaluation of CWMD systems and compon			
<ul> <li>FY 2019 Plans:</li> <li>Perform engineering and manufacturing development of CWMD syst specialized military units</li> <li>Perform system development and demonstration and initial operation</li> <li>Provide support to program management office on product development</li> </ul>	nal test and evaluation of CWMD systems and compon			
FY 2018 to FY 2019 Increase/Decrease Statement: Increase the result of reallocation across the portfolio in the POM-19 to transitions.	b better support full RDT&E cycle and technology			

# C. Other Program Funding Summary (\$ in Millions)

N/A

## Remarks

# D. Acquisition Strategy

Utilize or reuse information technologies to field initial capabilities to end-users. As technologies mature and user needs are refined, systems or applications may transition to acquisition program(s) or be sustained separately. Integration of or interoperability among systems is also an acquisition pathway.

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0.000

8.230

17.048

**Accomplishments/Planned Programs Subtotals** 

Exhibit R-2A, RDT&E Project Justification: PB 2019 Office of the Secretary	Of Defense	Date: February 2018
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0305310D8Z I CWMD Systems: System Development & Demonstration	Project (Number/Name) 813 / System Development & Demonstration
E. Performance Metrics		
Success in this area is measured by compliance with various statutes and Do Secretary of Defense for Nuclear, Chemical and Biological Defense Programs adjudication. Maintain requirements traceability matrix.		

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Office of the Secretary Of Defense

Date: February 2018

Appropriation/Budget Activity 0400 / 5

R-1 Program Element (Number/Name) PE 0305310D8Z / CWMD Systems: System 813 / System Development & Demonstration

Project (Number/Name)

Development & Demonstration

Product Developmen	nt (\$ in Mi	illions)		FY 2017		FY 2	2018	FY 2019 Base		FY 2		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Engineering & manufacturing development of information systems & components	C/T&M	TBD : TBD	0.000	0.000		4.115	Jan 2018	8.524	Jan 2020	0.000		8.524	Continuing	Continuing	-
Systems development & demonstration, and initial operational test & evaluation	C/T&M	TBD : TBD	0.000	0.000		3.292	Jan 2018	6.819	Jan 2020	-		6.819	Continuing	Continuing	-
Program management support	C/T&M	TBD : TBD	0.000	0.000		0.823	Jan 2018	1.705	Jan 2020	-		1.705	Continuing	Continuing	-
		Subtotal	0.000	0.000		8.230		17.048		0.000		17.048	Continuing	Continuing	N/A
			Prior					FY 2	2019	FY 2	2019	FY 2019	Cost To	Total	Target Value of

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	0.000	0.000	8.230	17.048	0.000	17.048	Continuing	Continuing	N/A

#### Remarks

NA

PE 0305310D8Z: CWMD Systems: System Development & Demon... Office of the Secretary Of Defense

xhibit R-4, l	RDT&E	Sch	edule	Prof	ile: PE	20	019 Offic	ce of t	he Sec	retary C	of Def	ense								Date: Fel	bruary 2018
<b>Appropriatio</b> 0400 / 5	n/Budg	et A	ctivity	y								R-1 Prog PE 03053 Developr	310D8	Z I CWI	ЙD Sy	/stems: S				umber/Na em Develo	ame) opment & Demonstration
					CI	٧r	VID Sy	sten	ns: S			velopm PE 0305			emo	nstrati	ion (	SDD)			
			Y17	1		F	Y18	1	FY	19		FY20			FY21			Y22	$\top$	FY2	3
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Exhibit R-4A, RDT&E Schedule Details: PB 2019 Office of the Secretary Of I	Defense		Date: February 2018
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0305310D8Z I CWMD Systems: System Development & Demonstration	, ,	umber/Name) em Development & Demonstration

# Schedule Details

	St	art	End		
Events by Sub Project	Quarter	Year	Quarter	Year	
Engineering & Manufacturing Development					
Develop information systems & components	2	2018	4	2023	
Operational Test & Evaluation					
Perform initial operational T&E	2	2018	4	2023	
Program Management Support			J.		
Provide PM support for development and T&E	2	2018	4	2023	